Contents volume 18

Ackermann, J., Helfrich, K.: Simultaneous ab initio calculations of isoelectronic diatomic molecules 365 Ahlrichs, R. → Greer, J.C. 413 Ahmed, K. → Rafi, M. 379 Anagnostopoulos, D.F., Borchert, G.L., Gotta, D., Rashid, K.: KX-ray satellites of uranium bombarded with 500 MeV neon 139 Andersen, N. → Dowek, D. 231 Angulo, J.C., Dehesa, J.S., Galvez, F.J.: New bounds for the atomic charge and momentum densities at the origin 127 Anton, M., Schartner, K.-H., Hasselkamp, D., Scharmann, A.: Excitation of He-41 Dsubstates by He +- and Ne +- projectiles investigated by level-crossing techniques 53 Arimondo, E. → Kaiser, R. 17 Arnesen, A. → Villemoes, P. 235 Aspect, A. → Kaiser, R. 17 Aufmuth, P., Henneberg, I., Siminski, A., Steudel, A.: Field shifts in hafnium II 107 Aynacioglu, A.S., Meißner, A.-H., Walachowicz, F., Oppen, G. v: Analysis of impactexcited Hel states by applying magnetic and electric depolarization techniques 85 Baer, T. → Weitzel, K.-M. 383 Behmenburg, W., Ermers, A., Rebentrost, F.: Test of $B\Sigma$ -interaction potentials in Na 3Prare gas systems from light scattering 93 Bergmann, K. → Littler, I.C.M. 307 Bitto, H. → Hack, E. 33 Blatter, F., Blazey, K.W.: Conduction electron spin resonance of silver clusters in zeolite Ag Y 427 Blazey, K.W. → Blatter, F. 427 Blümke, T. → Meierkord, W. 75 Boggasch, E. → Elfers, M. 207 Boldyrev, A.I. → Weikert, H.-G. 299 Booze, J.A. → Weitzel, K.-M. 383 Borchert, G.L. → Anagnostopoulos, D.F. Božić, M., Lombard, R., Marić, Z.: Remarks on the formulations of the adiabatic theorem 311 Brentano, P. von → Müller, D. 249 Breuer, H.P., Dietz, K., Holthaus, M.: Highly excited hydrogen atoms in strong microwave Brüssermann, M. → Meierkord, W. 75 Buck, U., Lauenstein, Ch., Rudolph, A.: Internal excitation effects in the photodissociation of size selected ethylene and methanol dimers 181 Cederbaum, L.S. → Weikert, H.-G. 299 Cefalas, A.C. → Skordoulis, C. 175 Ciancitto, M.C., Dellafiore, A., Matera, F.: Electric polarizability of small metal spheres 399 Cleff, B. → Meierkord, W. 75 Cohen-Tannoudji, C. → Kaiser, R. 17 Danzan, S. → Grum-Grzhimailo, A.N. 147 Deco, G., Grün, N.: An approximate description of the double capture process in He2++ He collisions with static correlation 339 Dehesa, J.S. → Angulo, J.C. 127 Dellafiore, A. → Ciancitto, M.C. 399 Demtröder, W. → Foth, H.-J. 257

Dietrich, K.-G. → Elfers, M. 207 Dietz, K. → Breuer, H.P. 239 Dowek, D., Houver, J.C., Richter, C., Andersen, N.: Collision spectroscopy with aligned and oriented atoms. IV. Neutralisation in H^- - Na(3 s, 3p) collisions 231 Dresch, T., Kramer, H., Thurner, Y., Weber, R.: Photodissociation of sulfur dioxide cluster anions 391 Dulieu, O. → Henriet, A. 287 Eichmann, U. → Lange, V. 319 Elbel, M. → Reese, C. 69 Elfers, M., Haas, C.R., Boggasch, E., Dietrich, K.-G., Hoffmann, D.H.H., Noll, R., Kunze, H., Herziger, G.: Z-pinch used as a plasma lens for heavy ion beams 207 Ermers, A. → Behmenburg, W. 93 Fink, M. → Zhang, Y. 163 Foth, H.-J., Grees, J.M., Hertzler, Chr., Demtröder, W.: Sub-Doppler-spectroscopy of Na₃ 257 Franosch, T., Soff, G.: The influence of the nuclear shape and of the muonic vacuum polarization on strongly bound electrons 219 Friedrich, B., Herschbach, D.R.: On the possibility of orienting rotationally cooled polar molecules in an electric field 153 Gadre, S.R., Kulkarni, A., Limaye, A.C., Shirsat, N.: Some aspects of parallelization of two-electron integrals in molecular orbital programs 357 Galvez, F.J. → Angulo, J.C. 127 Gassen, J. → Müller, D. 249 Gaubatz, U. → Littler, I.C.M. 307 Gayet, R., Hanssen, J., Martinez, A., Rivarola, R.: CDW and CDW-EIS investigations in an independent electron approximation for the resonant double electron capture by swift He2+ in helium 345 Gotta, D. → Anagnostopoulos, D.F. 139 Greer, J.C., Ahlrichs, R., Hertel, I.V.: Proton transfer in ammonia cluster cations: molecular dynamics in a self consistent field 413 Grees, J.M. → Foth, H.-J. 257 Grum-Grzhimailo, A.N., Danzan, S., Lhagva, O., Strakhova, S.I.: Resonances in angular distribution of secondary photons from an excited atom in the $(e+A^{+})$ recombination 147 Grün, N. → Deco, G. 339 Grün, N. → Momberger, K. 133 Haas, C.R. → Elfers, M. 207 Hack, E., Bitto, H., Huber, J.R.: Stark quantum beat spectroscopy of polyatomic mole-Hallin, R. → Villemoes, P. 235 Hanle, W.: Über magnetische Beeinflussung der Polarisation der Resonanzfluoreszenz 5 Hanssen, J. → Gayet, R. 345 Harbich, W. → Hippler, R. 61 Hasselkamp, D. → Anton, M. 53 Haub, G. → Keim, M. 117 Heckmann, P.H. → Möller, G. 223 Heijkenskjöld, F. → Villemoes, P. 235 Helfrich, K. → Ackermann, J. 365 Henneberg, I. → Aufmuth, P. 107 Henriet, A., Masnou-Seeuws, F., Dulieu, O.:

Diabatic representation for the excited states of the Na2 molecule: application to the associative ionization reaction between two excited sodium atoms 287 Hermann, G., Lasnitschka, G., Richter, J., Scharmann, A.: Level-crossing experiments by two-photon excitation 11 Hersbach, H., Ruijgrok, Th.W.: A quasipotential theory for the relativistic hydrogen atom 209 Herschbach, D.R. → Friedrich, B. 153 Hertel, I.V. → Greer, J.C. 413 Hertzler, Chr. → Foth, H.-J. 257 Herziger, G. → Elfers, M. 207 Heß, B. → Windholz, L. 373 Hippler, R., Plotzke, O., Harbich, W., Madeheim, H., Kleinpoppen, H., Lutz, H.O.: Coherent excitation of H(n=2) in H^+ , H-Hecollisions 61 Hoffmann, D.H.H. → Elfers, M. 207 Hofste, J. → Meierkord, W. 75 Holthaus, M. → Breuer, H.P. 239 Hotop, H. → Kraft, T. 403 Houver, J.C. → Dowek, D. 231 Huber, J.R. → Hack, E. 33 Hubrich, M., Knab, H., Knöll, K.H., Werth, G.: Ground- and excited state g-factors of 113 Husain, M.R. → Rafi, M. 379 ISOLDE Collaboration → Silverans, R.E. Jena, P. → Rao, B.K. 171 Kaiser, D., Liu, Y., Seeck, S., Kriescher, Y., Oppen, G. v: Precision measurement of the 1 s 4 f fine structure of Hel 45 Kaiser, R., Vansteenkiste, N., Aspect, A., Arimondo, E., Cohen-Tannoudji, C.: Mechanical Hanle effect 17 Kastberg, A. → Villemoes, P. 235 Keim, M., Haub, G., Otten, E.W., Scherf, M., Wendt, K.: Hyperfine structure studies in the 6s 6p 3P2-level of barium 117 Keller, H.-M. → Littler, I.C.M. 307 Khan, I.-A. → Rafi, M. 379 Khan, M.A. → Lange, V. 319 Khanna, S.N. → Rao, B.K. 171 King, R.B.: Topological models of the chemical bonding in transition metal-silicon clusters 189 Kleinermanns, K. → Wolf, K. 409 Kleinpoppen, H. → Hippler, R. 61 Klemz, G. → Kronfeldt, H.-D. 131 Knab, H. → Hubrich, M. 113 Knöll, K.H. → Hubrich, M. 113 Kosmidis, C. → Skordoulis, C. 175 Kraft, T., Ruf, M.-W., Hotop, H.: Effective absolute rate constant for the formation of negatively-charged CO2 cluster ions by electron transfer from state-selected Rydberg atoms 403 Kramer, H. → Dresch, T. 391 Kriescher, Y. → Kaiser, D. 45 Kronfeldt, H.-D., Klemz, G.: J-dependence of the isotope shift in Gd I 4f7 5d2 6s

(a11 F) 131

Kučar, J., Meyer, H.-D.: The time-dependent

rotated Hartree approach: A re-formulation

IV for the harmonic Lie algebra 325 Kuge, H.-H. → Wolf, K. 409 Kulkarni, A. → Gadre, S.R. 357 Kunze, H. → Elfers, M. 207 Lange, V., Khan, M.A., Eichmann, U., Sandner, W.: Rydberg states of the strontium ion 319 Lasnitschka, G. → Hermann, G. 11 Lauenstein, Ch. → Buck, U. 181 Lhagva, O. → Grum-Grzhimailo, A.N. 147 Lievens, P. → Silverans, R.E. 351 Limaye, A.C. → Gadre, S.R. 357 Lipparini, E., Stringari, S.: Collective excitations in deformed alkali metal clusters 193 Littler, I.C.M., Keller, H.-M., Gaubatz, U., Bergmann, K.: Velocity control and cooling of an atomic beam using a modeless laser Liu, Y. → Kaiser, D. 45 Livingston, A.E. → Möller, G. 223 Lombard, R. → Božić, M. 311 Lutz, H.O. → Hippler, R. 61 Madeheim, H. → Hippler, R. 61 Marić, Z. → Božić, M. 311 Marsch, C., Winter, H.: Complete density matrix of Hel 3 p excited in fast grazing ionsurface collisions via "Hanle-effect" 25 Martinez, A. → Gayet, R. 345 Masnou-Seeuws, F. → Henriet, A. 287 Matera, F. → Ciancitto, M.C. 399 Matsuo, S., Satou, S., Suzuki, M., Sano, M., Nakano, H.: Magnetic properties of small nickel oxide clusters enclosed in Y-zeolite 281

Meierkord, W., Blümke, T., Brüssermann, M., Hofste, J., Menzebach, H.-U., Pennings, J.F., Stachura, Z., Vollmer, W., Wigger, J., Cleff, B.: P_{3/2}-alignment following heavy ion impact 75 Meißner, A.-H. → Aynacioglu, A.S. 85

Meng, J. → Rao, B.K. 171 Menzebach, H.-U. → Meierkord, W. 75 Meyer, H.-D. → Kučar, J. 325

Mokler, P.H. → Möller, G. 223

Möller, G., Träbert, E., Heckmann, P.H., Mokler, P.H., Livingston, A.E.: Quest for experimental M1 and E1-intercombination transition probabilities in few-electron Xe ions 223

Momberger, K., Grün, N., Scheid, W.: Coupled channel analysis of electron-positron pair production in relativistic heavy ion collisions 133

Müller, D., Gassen, J., Scheuer, F., Sträter, H.D., Brentano, P. von: Autocollimation spectroscopy for fast hydrogenic ions 249 Nakano, H. → Matsuo, S. 281 Neugart, R. → Silverans, R.E. 351 Noll, R. → Elfers, M. 207 Nordling, C. → Villemoes, P. 235

Oppen, G. v → Aynacioglu, A.S. 85 Oppen, G. v → Kaiser, D. 45 Otten, E.W. → Keim, M. 117 Pennings, J.F. → Meierkord, W. 75 Pichler, G. → Windholz, L. 373 Plotzke, O. → Hippler, R. 61

Rafi, M., Ahmed, K., Khan, I.-A., Husain, M.R.: Ultraviolet bands of Na2 and K2 379 Rao, B.K., Khanna, S.N., Meng, J., Jena, P.: Geometries and binding energies of small beryllium clusters using various levels of approximations for exchange and correlation: a comparative study 171

Rashid, K. → Anagnostopoulos, D.F. 139 Rebentrost, F. → Behmenburg, W. 93 Reese, C., Strauß, Th., Elbel, M.: Exchange interaction during electron capture in Ar2 K-collisions 69

Richter, C. → Dowek, D. 231 Richter, J. → Hermann, G. 11

Rinkleff, R.-H., Steudel, A., Zeiske, K.: Stark effect study of the $4 \, f^6 \, 6 \, s^2 \, ^7 F_{1,2,3,4,5,6}$ levels of samarium using nonlinear level cross-

ing technique 101 Rivarola, R. → Gayet, R. 345 Rosén, A. → Wästberg, B. 267 Ross, A.W. → Zhang, Y. 163 Rudolph, A. → Buck, U. 181 Ruf, M.-W. → Kraft, T. 403 Ruijgrok, Th.W. → Hersbach, H. 209 Sandner, W. → Lange, V. 319

Sano, M. → Matsuo, S. 281 Sarantopoulou, E. → Skordoulis, C. 175 Satou, S. → Matsuo, S. 281 Scharmann, A. → Anton, M. 53

Scharmann, A. → Hermann, G. 11 Schartner, K.-H. → Anton, M. 53 Scheid, W. → Momberger, K. 133 Scherf, M. → Keim, M. 117

Scheuer, F. → Müller, D. 249 Seeck, S. → Kaiser, D. 45 Shirsat, N. → Gadre, S.R. 357

Silverans, R.E., Vermeeren, L., Neugart, R., Lievens, P., ISOLDE Collaboration: Hyperfine structure constants of the Call states $4s^2S_{1/2}$ and $4p^2P_{1/2,3/2}$ and the nuclear quadrupole moment of ⁴³Ca 351

Siminski, A. → Aufmuth, P. 107 Skordoulis, C., Sarantopoulou, E., Spyrou, S.M., Kosmidis, C., Cefalas, A.C.: Laser induced fluorescence (LIF) of Hg2 and Hg3 via dissociation of HgBr2 at 157 nm 175 Soff, G. → Franosch, T. 219 Spyrou, S.M. → Skordoulis, C. 175

Stachura, Z. → Meierkord, W. 75 Steudel, A. → Aufmuth, P. 107 Steudel, A. → Rinkleff, R.-H. 101

Strakhova, S.I. -> Grum-Grzhimailo, A.N. Sträter, H.D. → Müller, D. 249

Strauß, Th. → Reese, C. 69 Stringari, S. → Lipparini, E. 193 Suzuki, M. → Matsuo, S. 281 Tarantelli, F. → Weikert, H.-G. 299 Thurner, Y. → Dresch, T. 391 Träbert, E. → Möller, G. 223 Vansteenkiste, N. → Kaiser, R. 17 Vermeeren, L. → Silverans, R.E. 351 Villemoes, P., Wännström, A., Arnesen, A., Hallin, R., Heijkenskjöld, F., Kastberg, A., Nordling, C., Vogel, O.: Hyperfine structure of Mn II by fast ion beam-laser spectro-Vogel, O. → Villemoes, P. 235

Vollmer, W. → Meierkord, W. 75 Walachowicz, F. → Aynacioglu, A.S. 85 Walters, H.R.J. → Zhang, X. 309

Wännström, A. → Villemoes, P. 235 Wästberg, B., Rosén, A.: Calculation of photoionization cross sections of Na2-8 and K2-8 clusters 267

Weber, R. → Dresch, T. 391

Weikert, H.-G., Cederbaum, L.S., Tarantelli, F., Boldyrev, A.I.: On the existence of free doubly negative molecular ions 299

Weitzel, K.-M., Booze, J.A., Baer, T.: The metastable formation of di-ethylchloronium ions from ethylchloride dimer ions in a seeded molecular beam 383

Wendt, K. → Keim, M. 117 Werth, G. → Hubrich, M. 113 Whelan, C.T. → Zhang, X. 309 Wigger, J. → Meierkord, W. 75

Windholz, L., Zerza, G., Pichler, G., Heß, B.: Visible-laser-induced chemiluminescence of NaHg red excimer bands 373

Winter, H. → Marsch, C. 25

Wintgen, D.: Dynamical symmetries of a hydrogen atom in a circularly polarized electromagnetic field 125

Wolf, K., Kuge, H.-H., Kleinermanns, K.: Master equation calculations of cluster formation in supersonic jets 409

Zeiske, K. → Rinkleff, R.-H. 101

Zerza, G. → Windholz, L. 373 Zhang, X., Whelan, C.T., Walters, H.R.J.: Electron impact ionization of the noble gases in coplanar symmetric geometry over the energy range 100 to 1000 eV 309

Zhang, Y., Ross, A.W., Fink, M.: Electron correlation and charge density study of N2 and O2 by high energy electron scattering

Indexed in Current Contents Evaluated and abstracted for PHYS on STN

